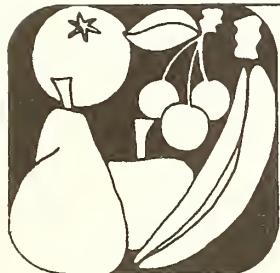


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PRICES, COSTS AND MARGINS OF FLORIDA GRAPEFRUIT FRESH AND PROCESSED

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Prices, Costs and Margins of Florida Grapefruit— Fresh and Processed

by

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Abstract: Florida is the leading producer of grapefruit, accounting for 76 percent of the 1973/74 U.S. crop. During the last decade processing has become the leading outlet for Florida grapefruit, with canned juice the most important processed product. This article traces trends in prices, costs, margins, and grower returns for Florida grapefruit, including fresh grapefruit, canned grapefruit juice, and canned grapefruit sections. Florida growers' share of the retail value in most seasons was larger for grapefruit juice than for either fresh grapefruit or canned sections. Florida growers have maintained their share of the consumer dollar for each of the three grapefruit products during the past 9 seasons.

Key Words: Grapefruit, fresh, canned, retail price, costs, margins, grower returns.

INTRODUCTION

Per capita consumption of fresh grapefruit trended upward between 1963 and 1974. Consumption averaged 8.2 pounds (fresh weight) in 1974, 1.8 pounds more than in 1963 (table 1). Consumption of canned grapefruit juice also increased, rising from 1.3 pounds (product weight) per person in 1963 to 3.6 pounds in 1974. Consumption of canned grapefruit sections per person remained relatively stable during the period, averaging about ½ pound (product weight) per year.

U.S. commercially produced grapefruit in 1973/74 (table 2). That season nearly 2.7 million tons of grapefruit were produced nationally, 94 percent more than in 1963/64. Production increased in Florida, Texas, and California and declined slightly in Arizona over this period. Texas, recovering from a killing freeze in 1961/62, increased its share of the U.S. crop from 2 percent in 1963/64 to 16 percent in 1973/74. In spite of larger crops, Florida's share of the U.S. crop declined from 81 percent to 76 percent during this period.

Florida produced 48.1 million boxes of grapefruit in 1973/74, or 83 percent more than 1963/64 (table 3). Most of the larger production was processed. Fresh use increased only 4 million boxes, or 27 percent, while processed grapefruit products took 29.4 million boxes in 1973/74, about ½ times the amount in 1963/64. The portion of Florida's crop marketed fresh dropped from 56 percent in 1963/64 to 35 percent in 1970/71, but has increased slightly each season since. Grapefruit processed into canned juice increased sharply between 1963/64 and 1970/71. Canned grapefruit juice's share of Florida's crop increased from 15 percent in 1963/64 to 34 percent in 1970/71, but has declined slightly since.

This article discusses prices, marketing costs, margins, and grower returns for fresh grapefruit, canned grapefruit juice, and canned grapefruit sections. Data used are from a continuing study of costs and margins for fruits and vegetables conducted by the Economic Research Service (ERS).

Table 1—Grapefruit: U.S. consumption per capita, 1963-74

Year	Fresh grapefruit ¹	Canned ²	
		Juice	Sections
	Pounds	Pounds	Pounds
1963	6.4	1.3	.3
1964	7.5	1.1	.5
1965	8.3	1.4	.4
1966	8.4	1.7	.6
1967	9.0	2.3	.7
1968	8.0	2.2	.6
1969	7.8	2.9	.4
1970	8.2	3.0	.5
1971	8.6	3.3	.5
1972	8.6	3.3	.4
1973	8.6	3.5	.4
1974 ³	8.2	3.6	.4

¹ Fresh weight basis. ² Product weight basis. ³ Preliminary.

SRS reports grapefruit production in four States—Arizona, California, Florida, and Texas. However, Florida dominates, accounting for 76 percent of all

Table 2—Grapefruit: Production, selected States and United States, 1963/64-1973/74

Season	Florida		Texas		Other States		Total
	Amount	Percentage of total	Amount	Percentage of total	Amount	Percentage of total	
	1,000 tons	Percent	1,000 tons	Percent	1,000 tons	Percent	1,000 tons
1963/64	1,117.0	81	20.0	2	240.0	17	1,377.0
1964/65	1,356.0	81	80.0	5	230.8	14	166.8
1965/66	1,483.2	78	152.0	8	259.2	14	1,894.4
1966/67	1,853.0	81	216.0	9	217.0	10	2,286.0
1967/68	1,398.2	79	112.0	6	270.0	15	1,780.2
1968/69	1,695.8	77	268.0	12	244.9	11	2,208.7
1969/70	1,589.5	73	324.0	15	272.6	12	2,186.1
1970/71	1,823.2	74	404.0	16	244.6	10	2,471.8
1971/72	1,997.5	76	368.0	14	257.4	10	2,622.9
1972/73	1,929.5	72	472.0	18	274.3	10	2,675.8
1973/74	2,044.2	76	428.0	16	204.4	8	2,676.6

Source: Citrus Fruits, Production, Use, Value, by States, 1971-72, 1972-73, and 1973-74. October 1974, U.S. Dept. Agr., Crop Reporting Board. (Similar reports for earlier seasons)

Table 3—Florida grapefruit: Production and utilization, 1963/64-1973/74

Season	Production	Utilization of production									
		Fresh		Processed						Total processed	
		Amount	Share	Canned juice		Canned sections		Other products ¹			
				Amount	Share	Amount	Share	Amount	Share		
		1,000 boxes	1,000 boxes	Percent	1,000 boxes	Percent	1,000 boxes	Percent	1,000 boxes	Percent	1,000 boxes
1963/64	26,300	14,719	56.0	4,012	15.2	2,179	8.3	5,390	20.5	11,581	
1964/75	31,900	15,846	49.7	7,184	22.5	2,670	8.4	6,200	19.4	16,054	
1965/66	34,900	15,077	43.2	9,251	26.5	2,921	8.4	7,651	21.9	19,823	
1966/67	43,600	17,281	39.6	13,196	30.3	3,526	8.1	9,597	22.0	26,319	
1967/68	32,900	14,702	44.7	9,941	30.2	2,604	7.9	5,653	17.2	18,198	
1968/69	39,900	14,067	35.3	11,855	29.7	3,033	7.6	10,945	27.4	25,833	
1969/70	37,400	14,262	38.1	12,255	32.8	2,474	6.6	8,409	22.5	23,138	
1970/71	42,900	14,960	34.9	14,573	34.0	2,333	5.4	11,034	25.7	27,940	
1971/72	47,000	17,039	36.3	14,529	30.9	1,931	4.1	13,501	28.7	29,961	
1972/73	45,400	17,046	37.5	13,330	29.4	2,086	4.6	12,938	28.5	28,354	
1973/74	48,100	18,731	38.9	13,858	28.8	2,332	4.9	13,179	27.9	29,369	

¹ Frozen concentrated grapefruit juice, canned blend juice, canned citrus salad, chilled grapefruit sections, and chilled grapefruit juice.

1971-72, 1972-73, and 1973-74, October 1974, U.S. Dept. Agr., Crop Reporting Board (Similar reports for earlier seasons) and Florida Canners Association Statistical Summary, 1973-74 season (Similar reports for earlier seasons).

Source: Citrus Fruits, Production, Use, Value, by States,

FRESH GRAPEFRUIT

Marketing Patterns

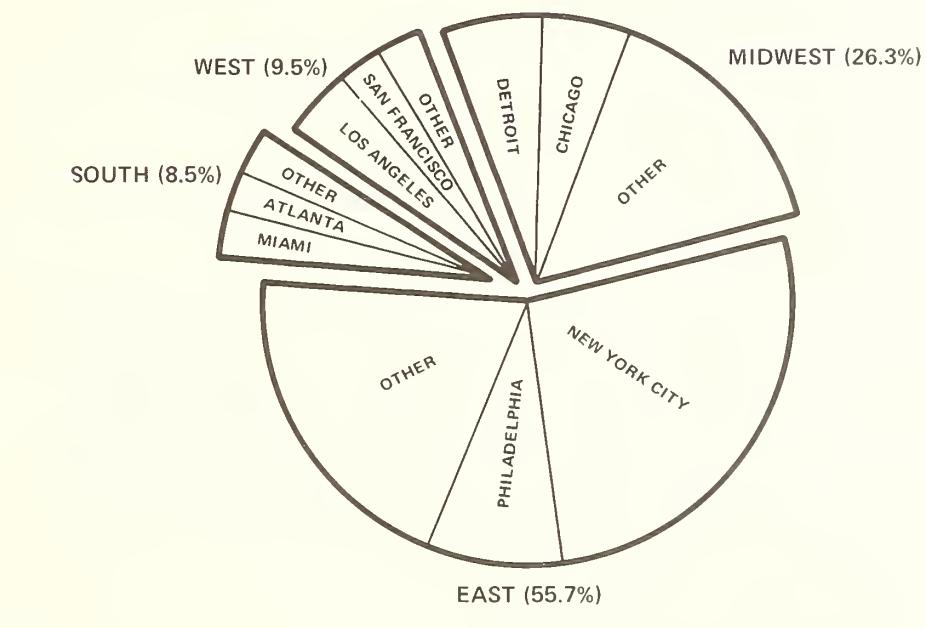
To get a better idea of where Florida fresh grapefruit are being sold, unload data from the Agricultural Marketing Service (AMS) for calendar 1963 through 1973 were evaluated. These data identify the source of monthly rail and truck unloads in 41 major U.S. cities. Carlots were converted to tons using AMS conversion factors to allow for different carlot weights during the period.

A large part of Florida's fresh grapefruit is marketed in the East—56 percent of the calendar 1971-

73 unloads went to eastern cities, with New York City alone taking 27 percent (Figure 1). The Midwest was the second largest market, taking 26 percent of the unloads. Chicago and Detroit were leading midwestern cities, taking slightly over 5 percent each. Ten percent were unloaded in the West and 8 percent in the South.

Changes have occurred in the distribution of Florida grapefruit since the early 1960's. The quantity of Florida grapefruit unloaded in 41 U.S. cities increased 12.9 percent from 1963-65 to 1971-73 (Figure 2). The East experienced the largest rise (23.3

DISTRIBUTION OF FLORIDA FRESH GRAPEFRUIT UNLOADS IN THE U.S. 1971-73



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Figure 1

FLORIDA FRESH GRAPEFRUIT UNLOADS 1963-65 TO 1971-73

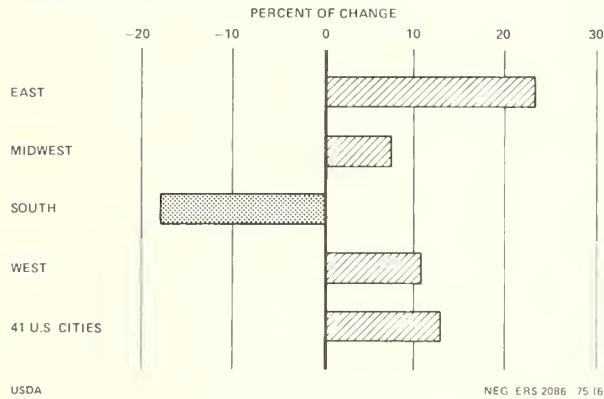


Figure 2

TRUCK UNLOADS OF FLORIDA FRESH GRAPEFRUIT BY REGIONS 1963-65 TO 1971-73

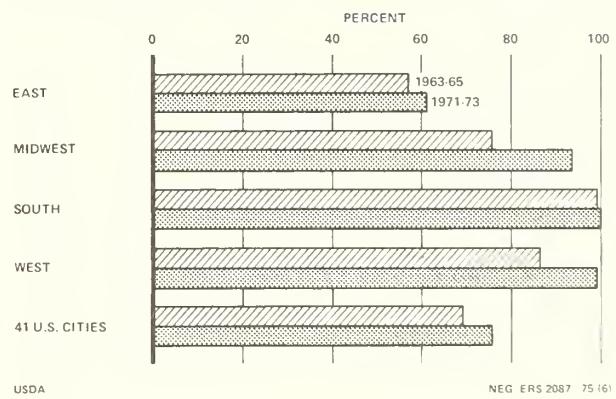


Figure 3

percent), followed by the West (10.6 percent), and the Midwest (7.5 percent). Unloads in the South, however, dropped 18.0 percent.

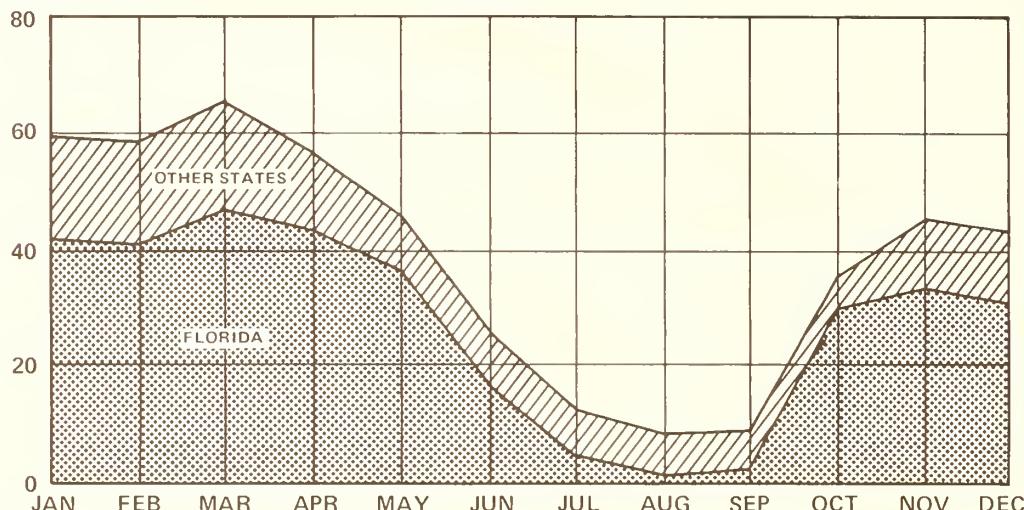
Trucks are playing an increasingly important role in moving Florida grapefruit to market. About 77 percent of the 41 city unloads arrived by truck in 1971-73, up from 69 percent in 1963-65 (Figure 3). Truck transportation increased in each region, with the largest increases occurring in the Midwest and the West.

Trucks accounted for virtually all of the reported unloads in the South and the West in 1971-73. No southern city and only San Francisco and Seattle in the West reported rail unloads in 1971-73. Nearly 40 percent of unloads in the East arrived by rail in 1971-73, with only two eastern cities reporting more than 40 percent rail unloads—New York City (55 percent) and Philadelphia (41 percent).

Figure 4 shows monthly grapefruit unloads in 41

MONTHLY FRESH GRAPEFRUIT UNLOADS 41 U.S. CITIES, 1971-73 AVERAGE

THOUS. TONS



USDA

NEG. ERS 2088 - 75 (6)

Figure 4

U.S. cities for calendar 1971-73 by place of origin. Florida grapefruit clearly dominate unloads in the 41 markets each month from October through June. Unloads come mainly from California and Arizona in the summer. Supplies from Mexico enter some U.S. markets in small quantities in the fall and winter.

Prices and price Spreads

Fresh, white, seedless grapefruit were priced at Florida shipping points and at wholesale and retail levels in Atlanta, Boston, Chicago, and Pittsburgh. Retail prices were collected by the Bureau of Labor Statistics in a sample of retail stores on the first consecutive Tuesday, Wednesday, and Thursday of each month. The wholesale price, reported by the Federal-State Market News Service, is the Tuesday price for the retail pricing week. The shipping point price is an average of daily prices for the week preceding the retail pricing week reported by the Florida Grower's Administrative Committee, based on prices compiled by Florida Citrus Mutual. Monthly retail, wholesale, and shipping point prices are weighted by monthly carlot unloads of Florida grapefruit in Atlanta, Boston, Chicago, and Pittsburgh to obtain the season average price (season: November-April).

The retail value of a box of fresh grapefruit is the return to the retailer for salable grapefruit (retail price minus 3 percent allowance for losses during the marketing process). Harvesting, hauling, packing, and selling costs are reported by the Florida Agricultural

Experiment Station. Grower returns are derived by deducting harvesting, hauling, packing, and selling costs from the shipping point price. The wholesale-retail spread, derived by deducting wholesale price from retail value, is payment for secondary wholesaling, intracity transportation, and retailing. The shipping point-wholesale spread, derived by deducting shipping point price from wholesale price, is payment for transportation from shipping point and primary wholesaling.

The retail price of fresh grapefruit in Atlanta, Boston, Chicago, and Pittsburgh increased on the average slightly less than one-third cent per pound per season between 1963/64-1973/74. The four-city average retail price was 16.9 cents per pound in 1973/74, 2.8 cents more than 10 seasons earlier (table 4). The retail value of an 85-pound box (or its equivalent) averaged \$13.97 in 1973/74, 20 percent higher than in 1963/64 (Figure 5). All the retail price increase occurred after 1970/71. Returns to Florida growers for grapefruit sold in the four cities, though highly variable, averaged \$1.97 in 1973/74, one-fourth less than in 1963/64. However, the 3-year average grower returns increased from \$1.92 in 1963/64-1965/66 to \$2.23 in 1971/72-1973/74, a 16 percent rise. Harvesting, hauling, packing, and selling costs rose from \$1.60 in 1963/64 to \$2.67 in 1973/74, a 67 percent increase. The shipping point-wholesale price spread more than doubled during the 11 seasons and the wholesale-retail price spread in-

creased by only a small amount, reflecting a sharp rise in wholesale prices. The total spread between shipping point and retail increased 23 percent be-

tween 1963/64 and 1973/74.

A simple trend line fitted to the data in table 4 indicates that the retail value of grapefruit sold in the

Table 4—Florida grapefruit: Seasonal average prices, spreads, costs, and returns, average Atlanta, Boston, Chicago, and Pittsburgh¹

Season	Retail price per pound	Retail value per box ²	Wholesale-retail spread ³		Shipping point-wholesale spread ⁴		Picking, hauling, packing and selling costs ⁵		Derived grower returns ⁶	
			Per box	Percent-age of retail value	Per box	Percent-age of retail value	Per box	Percent-age of retail value	Per box	Percent-age of retail value
1963/64	14.1	11.60	6.03	52	1.51	13	1.60	14	2.46	21
1964/65	12.8	10.57	5.70	54	1.59	15	1.70	16	1.58	15
1965/66	12.1	10.00	5.10	51	1.40	14	1.79	18	1.71	17
1966/67	11.3	9.33	5.22	56	1.12	12	1.79	19	1.20	13
1967/68	13.2	10.85	4.85	45	1.56	14	1.97	18	2.47	23
1968/69	13.4	11.03	5.54	50	1.71	16	2.00	18	1.78	16
1969/70	13.9	11.48	5.75	50	1.61	14	2.13	19	1.99	17
1970/71	13.6	11.22	5.53	49	1.72	15	2.20	20	1.77	16
1971/72	15.2	12.54	5.74	46	2.02	16	2.24	18	2.54	20
1972/73	16.4	13.47	6.48	48	2.20	17	2.60	19	2.19	16
1973/74 ⁷	16.9	13.97	6.04	43	3.29	24	2.67	19	1.97	14

¹ 6-month weighted average (Nov.-Apr.), white, seedless, size 40, packed in 2½ box cartons, 42.5 pounds net weight each.

² Returns of retailer for salable grapefruit (3-percent allowance for loss incurred during marketing process). ³ Retail value minus wholesale price. Payment for secondary wholesaling and retailing. ⁴ Wholesale price minus shipping point price. Payment for intercity transportation and primary wholesaling (assembly

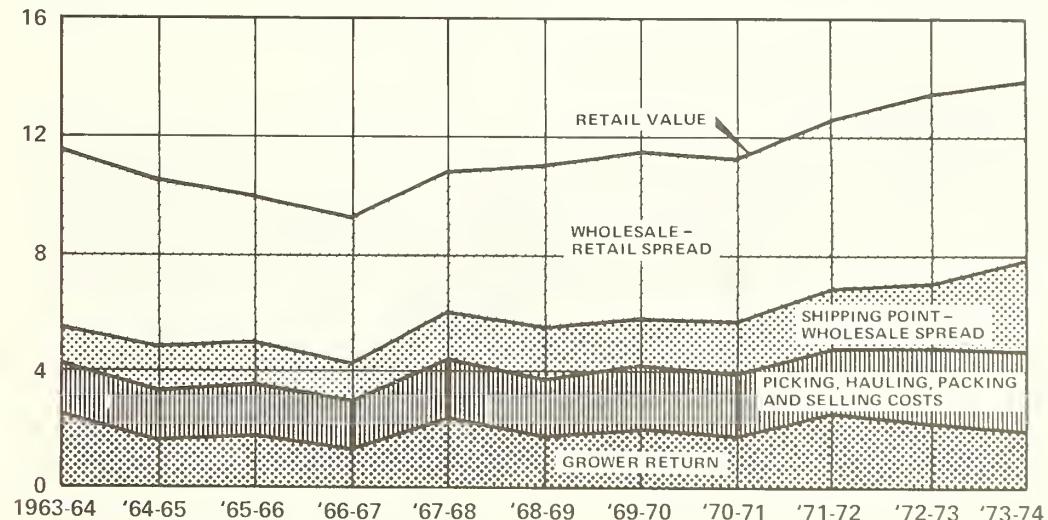
and warehousing). ⁵ Spurlock, A.H., Costs of Picking and Hauling Florida Citrus Fruits, 1972-73 season, Agr. Econ. Rpt. 60; and Spurlock, A.H., Costs of Packing and Selling Florida Fresh Citrus Fruits, 1972-73 Season, Agr. Econ. Rpt. 61, Fla. Agr. Expt. Sta.

⁶ Derived by deducting picking, hauling, packing costs from shipping point price. ⁷ Preliminary.

FLORIDA GRAPEFRUIT*

SEASON BEGINNING NOVEMBER

\$ PER BOX



*Sold in Atlanta, Boston, Chicago, and Pittsburgh

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NEG. ERS 2091 - 75 (6)

Figure 5

four cities increased an average of 32 cents per box per season since 1963/64. During the same period, the wholesale-retail spread increased 6 cents per box per season; the shipping point-wholesale spread rose 13 cents; harvesting, hauling, packing and selling costs went up 10 cents; and grower returns rose 3 cents.

The market share of the retail value going for the shipping point-wholesale spread increased on the average about two-thirds of a percentage point per season between 1963/64-1973/74. The increase was more than offset by a near 1 percentage point

decline per season in the wholesale-retail spread, resulting in a slight reduction in the total shipping point-retail spread's share of the retail value. The share taken by harvesting, hauling, packing and selling costs increased about one-third of a percentage point per season. The grower's share, although highly variable, did not show any significant trend over the period.

For the period, the wholesale-retail spread averaged 50 percent of the retail value; the shipping point-wholesale spread averaged 15 percent; harvesting, hauling, packing, and selling costs 18 percent; and grower returns 17 percent.

CANNED GRAPEFRUIT PRODUCTS

Canned grapefruit juice and sections were priced at three levels—delivered-in (delivered to the processing plant door), processor (f.o.b. processing plant), and retail. Quarterly retail prices used were collected by the Bureau of Labor Statistics in Detroit and Pittsburgh. Processor price is f.o.b. Florida processing plants as reported in the American Institute of Food Distribution's "Report on Food Markets" for the first week of the month in which retail prices are collected. Delivered-in price is a computed return for the quantity of grapefruit required to process a dozen cans of juice or 24 cans of sections—based on the seasonal average per box price paid by processors and seasonal average yield of juice or sections per box. Average prices paid by processors and average yields per box are reported by the Florida Canners Association. The retail value of canned grapefruit juice and sections is simply the retail price (no allowance is made for losses during marketing). Simple averages are made of quarterly retail prices, processor prices, and delivered-in price to obtain seasonal average prices (Season: Oct.-Sept.).

The wholesale and retail margin for canned grapefruit juice and sections is the difference between the retail price and the processor price. This margin includes payment for transportation from the processor to the consuming city, wholesaling or brokerage, intra-city transportation, and retailing. The processor margin is the difference between the processor price and the delivered-in price. It is the amount paid for processing, warehousing, and selling the product. The grower return (on-tree) is derived by deducting picking and hauling costs from the delivered-in price.

Canned Grapefruit Juice

The total supply of Florida canned grapefruit juice was 24.8 million cases (24/No. 2 cans) in 1973/74, double the short supply in 1965/66 (table 5). The 1965/66 short supply was the result of a reduced pack that season (12.1 million cases) and a small packers' carryin (0.3 million cases). Both the pack and

the carryin increased in 1966/67 and have trended upward since. The grapefruit juice pack reached 20.6 million cases in 1973/74, with a carryin of 4.2 million cases that season.

Table 5—Florida grapefruit juice: Packers' carryin, pack, and total supply, 1965/66-1973/74

Season	Packers' carryin	Season pack ¹	Total supply ¹
1,000 cases (equivalent to 24/No. 2 cans)			
1965/66	298	12,090	12,388
1966/67	1,093	17,844	18,937
1967/68	3,632	13,300	16,932
1968/69	3,659	15,445	19,104
1969/70	1,634	16,423	18,057
1970/71	819	19,366	20,185
1971/72	1,605	21,173	22,778
1972/73	4,310	19,059	23,369
1973/74	4,203	20,576	24,779

¹ Does not include reconstituted juice.

The retail price of canned grapefruit juice in Detroit and Pittsburgh, as estimated by the Bureau of Labor Statistics, averaged 51.6 cents per 46-oz. can in 1973/74, 8.2 cents more than in 1965/66. Retail price increases averaged 1.8 cents per can per season. The retail value of a dozen 46-oz. cans of grapefruit juice averaged \$6.20 in 1973/74, 19 percent greater than 8 seasons earlier (table 6 and Figure 6). The processor margin increased 41 percent while picking and hauling costs increased 56 percent. The wholesale and retail margin increased 1 percent during this period. Returns to Florida growers for grapefruit required to yield a dozen cans of juice were \$1.16 in 1973/74, 3 percent more than in 1965/66.

A simple trend line fitted to the data in table 6 indicates that the retail value of grapefruit juice sold in the two cities increased an average of 22 cents per dozen cans per season in 1965/66-1973/74. During this period the processor margin increased 8 cents per dozen cans per season, picking and hauling costs

Table 6—Florida grapefruit juice, canned: Seasonal prices, margins, costs, and returns, average Detroit and Pittsburgh¹

Season	Retail price per 46 oz. can	Retail value per doz. cans	Wholesale and retail margin ²		Processor margin		Picking and Hauling costs ³		Derived Grower return ⁴	
	Cents	Dollars	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
1965/66	43.4	5.20	1.90	36	1.81	35	.36	7	1.13	22
1966/67	37.4	4.50	1.68	37	1.97	44	.35	8	.50	11
1967/68	39.7	4.76	1.20	25	1.96	41	.39	8	1.21	26
1968/69	39.0	4.68	1.50	32	2.12	45	.43	9	.63	14
1969/70	45.2	5.43	1.30	24	2.38	44	.44	8	1.31	24
1970/71	49.7	5.96	1.51	25	2.52	42	.46	8	1.47	25
1971/72	52.4	6.29	1.75	28	2.31	37	.48	7	1.75	28
1972/73	50.8	6.09	1.74	28	2.23	37	.54	9	1.58	26
1973/74 ⁵	51.6	6.20	1.92	31	2.56	41	.56	9	1.16	19

¹ Marketing Season: October-September. ² Includes transportation from processing plant to Detroit and Pittsburgh.

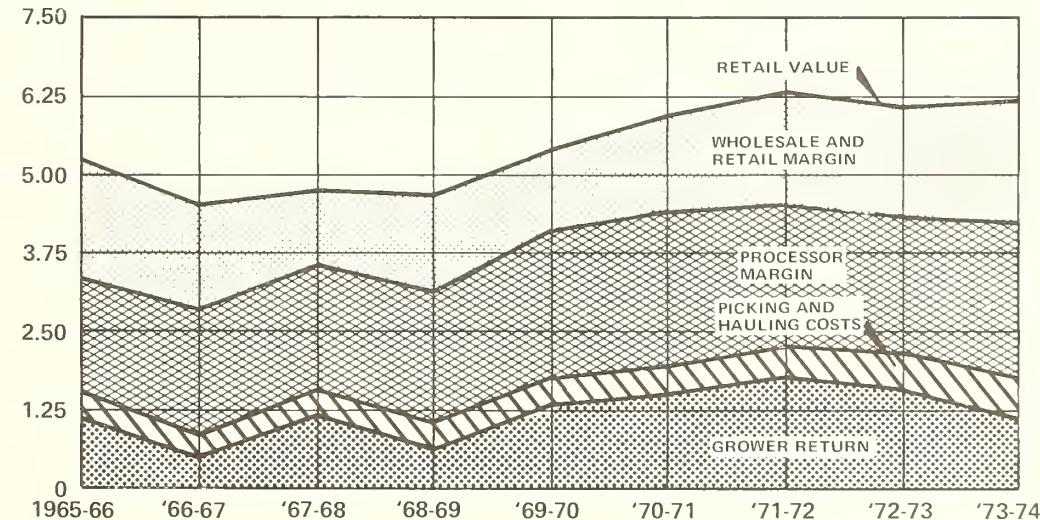
³ Calculated from data in Spurlock, A.H., Costs of Picking and Hauling Florida Citrus Fruits, 1972/73 Season, Ag. Econ. Rpt.

60, Fla. Agr. Expt. Sta., April 1974, using seasonal average quantity of grapefruit required to pack 12/46-oz. cans. ⁴ Returns to Florida growers for seasonal average quantity of grapefruit required to pack 12/46-oz. cans. ⁵ Preliminary.

CANNED GRAPEFRUIT JUICE SOLD IN DETROIT AND PITTSBURGH

SEASON BEGINNING OCTOBER

\$ PER CASE*



*Dozen 46 oz. cans

USDA

NEG. ERS 2089 - 75 (6)

Figure 6

went up 3 cents, the wholesale and retail margin rose 2 cents, and the grower return rose 9 cents.

In addition, the market shares or percentage of the retail value going to growers and other market factors did not show any significant trend over the period. For the 9 seasons the processor margin averaged 41 percent of the retail value; the wholesale and retail margin averaged 29 percent; picking and hauling costs 8 percent; and grower returns 22 percent.

Canned Grapefruit Sections

The total supply of Florida canned grapefruit sections was 3.4 million cases (24/No. 2 cans) in 1973/74, about one-fifth less than in 1965/66 (table 7). Total supply trended downward throughout the period, with the only appreciable increase occurring in 1966/67. Declining supplies were due mainly to declining

Table 7—Florida grapefruit sections: Packers' carrying, pack and total supply, 1965/66-1973/74

Season	Packers' carrying	Season pack	Total supply
1,000 cases (equivalent to 24/No. 2 cans)			
1965/66	372	4,002	4,374
1966/67	385	4,756	5,141
1967/68	895	3,412	4,307
1968/69	637	3,396	4,033
1969/70	523	3,325	3,848
1970/71	720	3,506	4,226
1971/72	666	2,752	3,418
1972/73	440	2,687	3,127
1973/74	323	3,027	3,350

packs, which dropped from 4.0 million cases in 1965/66 to 3.0 million cases in 1973/74.

The retail price of canned grapefruit sections in Detroit and Pittsburgh averaged 37.6 cents per No. 303 can in 1973/74, 10.4 cents higher than in 1965/66. Retail prices increased throughout the period, averaging slightly over 1 cent per can per season. The retail value of a 24-can case of grapefruit sections averaged \$9.02 in 1973/74, 38 percent more than 8 seasons earlier (table 8 and Figure 7). Returns to Florida growers for grapefruit sections sold in Detroit and Pittsburgh increased 17 percent, from \$0.83 to \$1.00 per case. Picking and hauling costs in Florida rose from 23 cents per case in 1965/66 to 39 cents in 1973/74, a 70 percent increase. The processor margin went up 53 percent to \$4.95 per case in 1973/74 and the wholesale and retail margin rose 20 percent to \$2.68 per case.

A simple trend line fitted to the data in table 8 indicates that the retail value of canned grapefruit sections sold in Detroit and Pittsburgh increased an average of 31 cents per case per season since 1965/66. During this same period, the processor margin increased 16 cents per case per season; the wholesale and retail margin went up 7 cents; grower returns rose 6 cents; and picking and hauling costs rose 2 cents.

Like canned grapefruit juice, the market shares or percentage of the retail value for canned grapefruit sections going to growers and other market factors did not show any significant trend over the period. For the 9 seasons, the processor margin averaged 53 percent, the wholesale and retail margin averaged 30 percent, picking and hauling costs 4 percent, and grower returns 13 percent.

Table 8—Florida grapefruit sections, canned: Seasonal average prices, margins, costs, and returns, average Detroit and Pittsburgh¹

Season	Retail price per No. 303 can	Retail value per case	Wholesale and retail margin ²		Processor margin		Picking and hauling costs ³		Derived grower returns ⁴	
			Per case	Percent- age of retail value	Per case	Percent- age of retail value	Per case	Percent- age of retail value	Per case	Percent- age of retail value
1965/66	27.2	6.53	2.23	34	3.24	50	.23	3	.83	13
1966/67	27.1	6.50	2.16	33	3.48	53	.23	4	.63	10
1967/68	27.4	6.57	1.82	28	3.39	51	.26	4	1.10	17
1968/69	28.9	6.94	1.88	27	3.98	57	.32	5	.76	11
1969/70	30.0	7.19	2.00	28	4.03	56	.29	4	.87	12
1970/71	30.3	7.27	2.15	30	4.01	55	.28	4	.83	11
1971/72	33.2	7.96	2.34	29	4.04	51	.32	4	1.26	16
1972/73	34.6	8.29	2.54	31	4.01	48	.38	5	1.36	16
1973/74 ⁵	37.6	9.02	2.68	30	4.95	55	.39	4	1.00	11

¹ Marketing Season: October-September. ² Includes transportation from processing plant to Detroit and Pittsburgh.

³ Calculated from data in Spurlock, A.H., Costs of Picking and Hauling Florida Citrus Fruits, 1972/73 Season, Ag. Econ. Rpt.

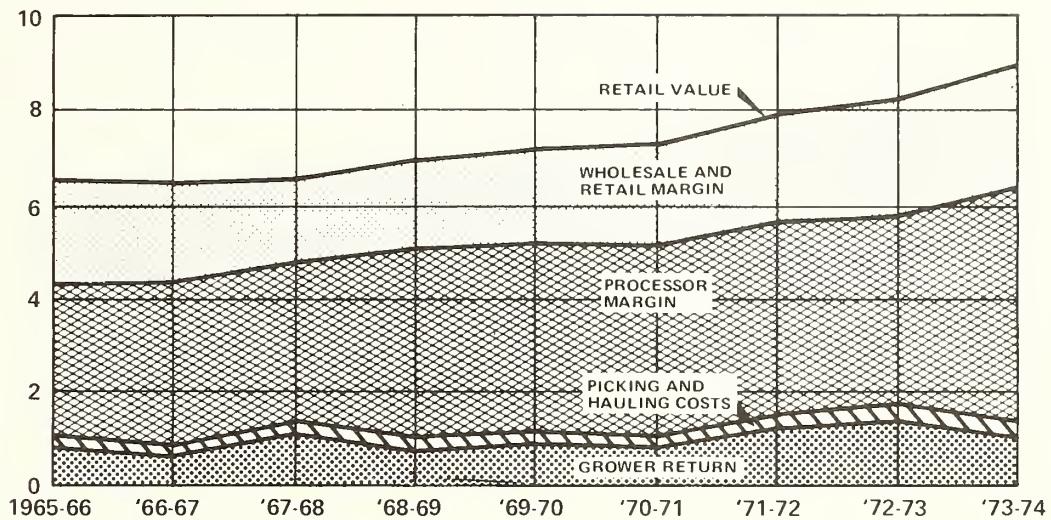
60, Fla. Agr. Expt. Sta., April 1974 using seasonal average quantity of grapefruit required to pack 24/No. 303 cans.

⁴ Returns to Florida growers for seasonal average quantity of grapefruit required to pack 24/No. 303 cans. ⁵ Preliminary.

**CANNED GRAPEFRUIT SECTIONS
SOLD IN DETROIT AND PITTSBURGH**

SEASON BEGINNING OCTOBER

\$ PER CASE*



* 24 No. 303 cans

USDA

NEG. ERS 2090 - 75 (6)

Figure 7

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